



Consolidated Edison Company  
of New York, Inc.  
4 Irving Place, 15<sup>th</sup> Floor NE  
New York NY 10003  
www.conEd.com

October 3, 2016

Mr. Victor Tu  
Chief, Air Compliance Branch  
United States Environmental Protection Agency Region II  
290 Broadway, 21<sup>st</sup> Floor  
New York, New York 10007

**Re: Request for Annual Approval Authorizing Dry Removal of Asbestos-Containing Arc-proof Material and Electric Wires with Asbestos-Containing Insulation at Various Facilities in New York State**

Dear Mr. Tu:

Pursuant to 40 CFR Section 61.145(c)(3)(ii), Consolidated Edison Company of New York, Inc. ("Con Edison"), the major energy supplier to the New York City metropolitan area, respectfully requests United States Environmental Protection Agency ("USEPA") renewed approval of our existing variance authorizing the following dry removal activities:

- i. The dry removal of asbestos containing arc-proof material from bundles of electric wires located within enclosed control and relay cabinets at Con Edison's facilities;
- ii. The dry removal of asbestos containing arc-proof material from electrical cables and equipment in Con Edison's facilities and electrical vaults;
- iii. The dry, intact removal of asbestos insulated electrical wires at Con Edison's facilities.

The USEPA's current approval for these dry removal activities expires on December 31, 2016. These dry removal activities are conducted by Con Edison personnel or contractors using negative air pressure enclosure procedures that were previously approved by USEPA on a case-by-case basis prior to its issuance of the annual authorizations discussed above. Typically, these dry removal activities are required as part of the maintenance, repair, replacement or enhancement of Con Edison's substations and control/relay systems and residential, commercial or industrial customers. As part of this work, Con Edison or its asbestos abatement contractors must first remove asbestos arc-proof material or wires with asbestos insulation in the generating stations' or substations' relay and control boxes, in these facilities' electrical galleries or within electrical vaults.

There are two reasons why the asbestos arc-proof material and electric wires with asbestos insulation cannot be saturated with amended water before they are removed from these facilities. First, the wires are integral to the operation of the facilities' switchgears, controls and instruments and cannot be de-energized without taking portions of these facilities out of service. Because the bundled wires from which asbestos arc-proof material must be removed may stay

energized during the arc-proof removal operation, the use of amended water in the material will present an electric shock hazard to the workers removing the material. When wires with asbestos insulation must be removed in the cabinets, those wires may not be energized. However, the other conductors and wires in the cabinets will typically be energized making the use of amended water risky. Second, the use of amended water in the cabinets may result in the buildup of excessive moisture within the cabinets which could damage the numerous delicate electrical contacts, switches and instruments that they house.

The use of amended water also presents a safety hazard to abatement workers when they remove asbestos arc-proofing material or electric wires with asbestos insulation in electric galleries or electric vaults because portions of these facilities will stay energized during the work. For example, asbestos arc-proofing material may be found on buss work in electric vaults. De-energizing the buss work would require, in many cases, cutting power to the customers served by the vaults.

In lieu of wetting the asbestos arc-proof material or electric wires with asbestos-containing insulation before their removal, Con Edison or its contractors will use the following methods:

To comply with NESHAP 61.145(c)(3)(i), the primary means of fiber control will be the establishment of negative pressure in the area of the abatement. This might require a complete enclosure to be built around the area or, when an enclosure is not feasible, the use of existing walls and sealing of all openings using plastic and erecting an entry flap. In both cases, a negative air machine will be used to establish a negative pressure differential inside the work area. The walls and floor of the vault will be vacuumed prior to re-occupancy. An airtight plastic enclosure will be built around the entry portal of the cabinet in which arc-proof material or asbestos insulated wire is removed. If the arc-proof material or the wire to be removed is in electric galleries or electric vaults, these enclosures will be built around the area where the work will be conducted. HEPA filtered equipped negative filtration devices will be used to create and maintain negative air filtration within the plastic enclosures.

Within the enclosure, the following procedures will be used:

- The arc-proof material will be gently removed from the bundled wires (or buss work, fuses, etc.). During this process, the nozzle of the HEPA vacuum will be held as close as possible or deemed electrically safe to the material being removed to capture any asbestos fibers that may have been released. When a manageable length of material has been unwrapped, the material will be cut with the HEPA vacuum's nozzle as close as possible to the material and the material will be gently placed into a six-mil plastic bag that contains amended water.
- For projects involving electrical wires with asbestos insulation, the insulation will not be stripped from the wire. Instead, the wire and its insulation together will be cut with the HEPA vacuum's nozzle held as close as possible to the wire. The wire will then be gently placed into a six-mil plastic bag that contains amended water and will be sprayed again with amended water after it has been placed into the bag.

- Workers who have completed a New York State (NYS)-approved asbestos training course and who have been certified by the NYS Department of Labor as NYS handlers will remove the arc-prof material and wire. For work conducted within the City of New York, the workers will also have Asbestos Handler certification issued by the New York City Department of Environmental Protection. The workers will wear protective clothing and respirators meeting the OSHA standards of 29 CFR 1926.1101. Immediately after exiting the enclosure in which the asbestos-containing material removal is being performed, the workers will proceed to an on-site personal decontamination facility where they will remove their protective clothing and take a shower.
- Airborne asbestos monitoring will be performed outside the enclosure in accordance with the applicable requirements of New York State and New York City asbestos regulations.

Con Edison will submit proper notification to the USEPA as provided by 40 CFR 61.145(b). The notification will indicate that the removal will be performed without the use of water, and reference will be made to this variance. A copy of this variance will be posted at the work area during all abatement activities.

Con Edison also requests approval to use these dry removal procedures for the removal of asbestos insulation from relay wires within Coupling Capacity Potential Devices (CCPD) and the Coupling Capacitor Voltage Transformers (CCVT) as its substations. The CCPDs and CCVTs reduce substation voltage so that it can be used for telemetry, metering and relay protection. The relay and control wire inside the CCPDs and CCVTs cannot be wetted because the electrical components, such as transformers, within these devices will be damaged by moisture. The same dry removal procedures identified above will be used to remove asbestos insulation inside CCPDs and CCVTs, except that the negative air pressure plastic enclosures will be erected around them.

If you have any questions concerning this request, or if there is anything Con Edison can do to expedite the processing of this request, please do not hesitate to call me at (212)-460-1132. Please direct all written response to the address on the letterhead. Thank you for your consideration.

Very truly yours,



William H. Morrison  
Senior Specialist, Environment, Health & Safety  
Asbestos Response Team

Attachments:

1. USEPA approval of dry removal at Con Edison facilities, dated October 15, 2015
2. Con Edison request for dry removal letter dated October 1, 2015.





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 2  
290 BROADWAY  
NEW YORK, NY 10007-1866

**OCT 15 2015**

William H. Morrison  
Senior Specialist, Environment, Health & Safety  
Consolidated Edison Company of New York, Inc.  
4 Irving Place, 15<sup>th</sup> Floor NE  
New York, NY 10003

Re: Request for renewal of annual approval authorizing dry removal of asbestos-containing arc-proof material and electric wires with asbestos containing insulation at various Con Edison facilities in New York State.

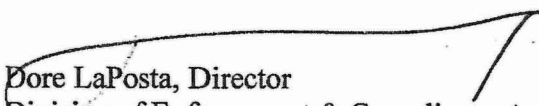
Dear Mr. Morrison:

The U.S. Environmental Protection Agency (EPA) has reviewed your request dated October 1, 2015 to renew the EPA's annual variance to Con Edison for removal of asbestos-containing arc-proof material and electrical insulation materials without the use of water, as referenced above. EPA has determined that the work practices outlined in your submittal are acceptable alternatives to wetting in controlling asbestos emissions. Pursuant to 40 C.F.R. Subpart M, EPA hereby authorizes Con Edison to use an alternative dry-removal procedure, as indicated in your submittal, with the following conditions:

1. EPA shall receive proper notification of the approved variance for removal of asbestos-containing material with reference to 61.145(c). The notification shall indicate that the removal will be performed without the use of water, and reference shall be made to this variance.
2. A separate notification is required for routine maintenance operations that involve the removal of threshold amounts of regulated asbestos-containing materials (RACM). The notification must be submitted according to 40 C.F.R. Part 61.145(b).
3. The work practices in the submittal, which is included as an Enclosure, will be part of the conditions of this authorization.
4. A copy of this variance with its enclosure must be posted at all work areas during abatement activities.
5. This variance shall remain effective until December 31, 2016.

If you have any questions, please contact Victor Tu, of my staff, at (212) 637-3476.

Sincerely,



Dore LaPosta, Director  
Division of Enforcement & Compliance Assistance

Enclosure



Consolidated Edison Company  
of New York, Inc.  
4 Irving Place, 15<sup>th</sup> Floor NE  
New York NY 10003  
www.conEd.com

October 1, 2015

Mr. Victor Tu  
Chief, Air Compliance Branch  
United States Environmental Protection Agency Region II  
290 Broadway, 21<sup>st</sup> Floor  
New York, New York 10007

**Re: Request for Annual Approval Authorizing Dry Removal of Asbestos-Containing Arc-proof Material and Electric Wires with Asbestos-Containing Insulation at Various Facilities in New York State**

Dear Mr. Tu:

Pursuant to 40 CFR Section 61.145(c)(3)(ii), Consolidated Edison Company of New York, Inc. ("Con Edison"), the major energy supplier to the New York City metropolitan area, respectfully requests United States Environmental Protection Agency ("USEPA") renewed approval of our existing variance authorizing the following dry removal activities:

- i. The dry removal of asbestos containing arc-proof material from bundles of electric wires located within enclosed control and relay cabinets at Con Edison's facilities;
- ii. The dry removal of asbestos containing arc-proof material from electrical cables and equipment in Con Edison's facilities and electrical vaults;
- iii. The dry, intact removal of asbestos insulated electrical wires at Con Edison's facilities.

The USEPA's current approval for these dry removal activities expires on December 31, 2015. These dry removal activities are conducted by Con Edison personnel or contractors using negative air pressure enclosure procedures that were previously approved by USEPA on a case-by-case basis prior to its issuance of the annual authorizations discussed above. Typically, these dry removal activities are required as part of the maintenance, repair, replacement or enhancement of Con Edison's substations and control/relay systems and residential, commercial or industrial customers. As part of this work, Con Edison or its asbestos abatement contractors must first remove asbestos arc-proof material or wires with asbestos insulation in the generating stations' or substations' relay and control boxes, in these facilities' electrical galleries or within electrical vaults.

There are two reasons why the asbestos arc-proof material and electric wires with asbestos insulation cannot be saturated with amended water before they are removed from these facilities. First, the wires are integral to the operation of the facilities' switchgears, controls and instruments and cannot be de-energized without taking portions of these facilities out of service. Because the bundled wires from which asbestos arc-proof material must be removed may stay

energized during the arc-proof removal operation, the use of amended water in the material will present an electric shock hazard to the workers removing the material. When wires with asbestos insulation must be removed in the cabinets, those wires may not be energized. However, the other conductors and wires in the cabinets will typically be energized making the use of amended water risky. Second, the use of amended water in the cabinets may result in the buildup of excessive moisture within the cabinets which could damage the numerous delicate electrical contacts, switches and instruments that they house.

The use of amended water also presents a safety hazard to abatement workers when they remove asbestos arc-proofing material or electric wires with asbestos insulation in electric galleries or electric vaults because portions of these facilities will stay energized during the work. For example, asbestos arc-proofing material may be found on buss work in electric vaults. De-energizing the buss work would require, in many cases, cutting power to the customers served by the vaults.

In lieu of wetting the asbestos arc-proof material or electric wires with asbestos-containing insulation before their removal, Con Edison or its contractors will use the following methods:

To comply with NESHAP 61.145(c)(3)(i), the primary means of fiber control will be the establishment of negative pressure in the area of the abatement. This might require a complete enclosure to be built around the area or, when an enclosure is not feasible, the use of existing walls and sealing of all openings using plastic and erecting an entry flap. In both cases, a negative air machine will be used to establish a negative pressure differential inside the work area. The walls and floor of the vault will be vacuumed prior to re-occupancy. An airtight plastic enclosure will be built around the entry portal of the cabinet in which arc-proof material or asbestos insulated wire is removed. If the arc-proof material or the wire to be removed is in electric galleries or electric vaults, these enclosures will be built around the area where the work will be conducted. HEPA filtered equipped negative filtration devices will be used to create and maintain negative air filtration within the plastic enclosures.

Within the enclosure, the following procedures will be used:

- The arc-proof material will be gently removed from the bundled wires (or buss work, fuses, etc.). During this process, the nozzle of the HEPA vacuum will be held as close as possible or deemed electrically safe to the material being removed to capture any asbestos fibers that may have been released. When a manageable length of material has been unwrapped, the material will be cut with the HEPA vacuum's nozzle as close as possible to the material and the material will be gently placed into a six-mil plastic bag that contains amended water.
- For projects involving electrical wires with asbestos insulation, the insulation will not be stripped from the wire. Instead, the wire and its insulation together will be cut with the HEPA vacuum's nozzle held as close as possible to the wire. The wire will then be gently placed into a six-mil plastic bag that contains amended water and will be sprayed again with amended water after it has been placed into the bag.

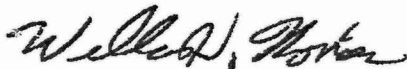
- Workers who have completed a New York State (NYS)-approved asbestos training course and who have been certified by the NYS Department of Labor as NYS handlers will remove the arc-proof material and wire. For work conducted within the City of New York, the workers will also have Asbestos Handler certification issued by the New York City Department of Environmental Protection. The workers will wear protective clothing and respirators meeting the OSHA standards of 29 CFR 1926.1101. Immediately after exiting the enclosure in which the asbestos-containing material removal is being performed, the workers will proceed to an on-site personal decontamination facility where they will remove their protective clothing and take a shower.
- Airborne asbestos monitoring will be performed outside the enclosure in accordance with the applicable requirements of New York State and New York City asbestos regulations.

Con Edison will submit proper notification to the USEPA as provided by 40 CFR 61.145(b). The notification will indicate that the removal will be performed without the use of water, and reference will be made to this variance. A copy of this variance will be posted at the work area during all abatement activities.

Con Edison also requests approval to use these dry removal procedures for the removal of asbestos insulation from relay wires within Coupling Capacity Potential Devices (CCPD) and the Coupling Capacitor Voltage Transformers (CCVT) as its substations. The CCPDs and CCVTs reduce substation voltage so that it can be used for telemetry, metering and relay protection. The relay and control wire inside the CCPDs and CCVTs cannot be wetted because the electrical components, such as transformers, within these devices will be damaged by moisture. The same dry removal procedures identified above will be used to remove asbestos insulation inside CCPDs and CCVTs, except that the negative air pressure plastic enclosures will be erected around them.

If you have any questions concerning this request, or if there is anything Con Edison can do to expedite the processing of this request, please do not hesitate to call me at (212)-460-1132. Please direct all written response to the address on the letterhead. Thank you for your consideration.

Very truly yours,



William H. Morrison  
Senior Specialist, Environment, Health & Safety  
Asbestos Response Team

Attachments:

1. USEPA approval of dry removal at Con Edison facilities, dated December 31, 2014
2. Con Edison request for dry removal letter dated October 17, 2014.